

Application No. 09/670,884

16. (Twice Amended) An apparatus for the classification of solid particulates entrained in a fluid, comprising:

a housing containing a feed inlet, a fine fraction outlet, and a coarse fraction outlet; and

a classifier wheel comprising an upper solid surface and a lower surface defining a first concentric circular opening therein;

a plurality of blade vanes connecting the upper surface to the lower surface at the peripheral edges of the upper and lower surfaces, and

an article comprising:

a disk defining a concentric circular opening; and

a fastener for concentrically attaching the disk to a particle outlet opening of said classifier wheel and wherein said article is fixed to the lower surface which forms a second concentric circular opening within the first concentric circular opening and reduces a diameter of the first concentric circular opening.

22. (Twice Amended) A kit comprising:

a disk defining a concentric circular opening; and

at least one fastener adapted to attach the disk to a particle outlet opening of a classifier wheel.

23. (Amended) An article in accordance with claim 1, further comprising a centrifugal valve for adjusting the diameter of the circular opening.

#### REMARKS

Claims 1-18, 22, and 23 are pending.

Claims 1-18, 22, and 23 stand rejected.

Application No. 09/670,884

Claims Objections

Claim 16 is objected to because of the following informalities:

Lines 15-18 of this claim are identical to lines 10-12 of the same claim.

In order to advance prosecution, Applicants have amended claim 16 as indicated, and it is believed that this amendment does not, in Applicants' view, relate to the patentability or unpatentability of the rejected claim.

Claim Rejections – 35 U.S.C. §112

Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, which rejection is traversed.

In order to advance prosecution, Applicants have slightly changed claims 1-23 as suggested by the Examiner, and which changes, in the Applicants view, do not relate to the patentability or unpatentability of the rejected claims.

With regard to the Examiner's assertions on page 4, paragraph 2 of the office action beginning with "Further instances of indefiniteness are as follows:", Applicants' are not in agreement with the Examiner's position regarding claims 2, 3, and 4. A patent application is presumed enabled when filed. The Examiner has failed to provide evidence as to why the Examiner doubts the truth of the statements contained in claims 2-4.

The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation. Applicants, through their disclosure, Figures, examples and claims have provided sufficient information regarding the subject matter of the claims as to enable one of ordinary skill in the pertinent art to make and use the claimed invention without undue or unreasonable experimentation.

Application No. 09/670,884

By law a patent application is presumptively enabled when filed. That is, during examination, "as a matter of Patent Office practice . . . a specification. . . must be taken as in compliance with the enablement requirement of the first paragraph of § 112 unless there is reason to doubt the objective truth of the statements contained therein, which must be relied on for enabling support." *In re Marzocchi*, 439 F.2d at 223, 169 U.S.P.Q. at 369. Moreover,

. . . it is incumbent upon the Patent Office, whenever a rejection on [grounds of enablement] is made, to explain why it doubts the truth or accuracy of any statement in a supporting disclosure and to back up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement. Otherwise there would be no need for the applicant to go to the trouble and expense of supporting his presumptively accurate disclosure.

*Id.* at 224, 169 U.S.P.Q. at 369-70. Indeed, as pointed out by the PTO in the *Section 112 Enablement Training Manual* (citing *In re Wright*, 999 F.2d at 1561-62, 27 U.S.P.Q.2d at 1513), "the case law makes clear that properly reasoned and supported statements explaining any failure to comply with section 112 are a requirement to support a rejection."<sup>18</sup>

In accordance with MPEP 2164.04, in order to make a rejection, the Examiner has the initial burden to establish a reasonable basis to question enablement provided for the claimed invention. *In re Wright*, 999 F.2d 1557, 1562, 27 USPQ2D 1510, 1513 (Fed. Cir. 1993) (Examiner must provide a reasonable explanation as to why the scope of protection provided by a claim is not adequately enabled by the disclosure). A specification disclosure which contains a teaching of

Application No. 09/670,884

the manner and process of making and using an invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented must be taken as being in compliance with the enablement requirement of 35 U.S.C. § 112, first paragraph, unless there is a reason to doubt the objective truth of the statements contained therein which must be relied on for enabling support.

As stated by the court, "it is incumbent upon the Patent Office, whenever a rejection on this basis is made, to explain why it doubts the truth or accuracy of any statement in a supporting disclosure and to back up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement". Otherwise, there would be no need for the applicant to go to the trouble and expense of supporting his presumptively accurate disclosure." 439 F.2d at 224, 169 USPQ at 370. See also *Utter v. Hiraga*, 845 F.2d at 998, 6 U.S.P.Q.2d at 1714 ("A specification may, within the meaning of 35 U.S.C. § 112, first paragraph, contain a written description of a broadly claimed invention without describing all species that claim encompasses"), and the embodiment need not necessarily have even been reduced to practice. See *In re Wright*, 999 F.2d 1557, 1561, 27 U.S.P.Q.2d 1510, 1513 (Fed. Cir. 1993) ("Nothing more than objective enablement is required, and therefore it is irrelevant whether a teaching is provided through broad terminology or illustrative examples."

#### Claim Rejections – 35 U.S.C. §102

Claims 1, 10, 16, and 23 are rejected under 35 U.S.C. §102 for failing to positively recite the functional limitation "adapted to concentrically attach the disk to a (the) particle outlet opening of a classifier wheel" which rejection is traversed.

---

" The PTO Training Manual is available on-line at <http://www.uspto.gov> by clicking on the following: "Info by Organization," "Asst. Commissioner for Patents - Office of Patent Policy Dissemination," "Special Training."

Application No. 09/670,884

Claims 1, 10, and 16 have been slightly changed as suggested by the Examiner to positively recite "a fastener for concentrically attaching the disk to the particle outlet opening of a classifier wheel", and which changes do not, in the Applicants' view relate to patentability or unpatentability.

With regard to the Examiner's comments relating to the phrase "the adjustment of the diameter of the circular opening is accomplished with a centrifugal valve", the Examiner did not reference a claim number. Applicants have presumed that the Examiner is referring to claim 23.

The Applicants have slightly changed claim 23 as suggested by the Examiner to provide a functional recitation and which changes, in the Applicants' view, do not relate to patentability or unpatentability.

With regard to all of the following rejections of claims 1-9, 22, and 23 under 35 U.S.C. §102(b) as anticipated, the references US 5,123,711, US 5,744,445, US 4,841,518, US 4,703,636, US 3,879980, US d30995, US 5,522,706, US 5,633,856, and US d32,793 cited by the Examiner lack, at the least, the element of a particle opening and a classifier wheel. In addition, US 4,841,518, US 5,774,445, US 4,703,636, US 3,879,980, US 5,522,706, US 5,633,856, US 5,123,711 do not define circular openings. Accordingly, the references cited by the Examiner, US 5,123,711, US 5,744,445, US 4,841,518, US 4,703,636, US 3,879980, US d30995, US 5,522,706, US 5,633,856, and US d32,793 do not anticipate the claimed invention.

In view of the above remarks, Applicants respectfully request that the following rejections of claims 1-9, 22, and 23 under 35 U.S.C. §102 be withdrawn and which withdrawal is respectfully requested.

Claims 1-9, 22, and 23 were rejected under 35 U.S.C. 102(b) as being clearly anticipated by US 4, 841,518, which rejection is traversed.

Application No. 09/670,884

Claims 1-9, 22, and 23 were rejected under 35 U.S.C. 102(b) as being clearly anticipated by US 5,123,711, which rejection is traversed.

Claims 1-9, 22, and 23 were rejected under 35 U.S.C. 102(b) as being clearly anticipated by US 5,744,445, which rejection is traversed.

Claims 1-9, 22, and 23 were rejected under 35 U.S.C. 102(b) as being clearly anticipated by US 4,703,636, which rejection is traversed

Claims 1-9, 22, and 23 were rejected under 35 U.S.C. 102(b) as being clearly anticipated by US 3,879,980, which rejection is traversed.

Claims 1-8, 22, and 23 were rejected under 35 U.S.C. 102(b) as being clearly anticipated by US d30995, which rejection is traversed.

Claims 1-9, 22, and 23 were rejected under 35 U.S.C. 102(b) as being clearly anticipated by US 5,522,706, which rejection is traversed.

Claims 1-9, 22, and 23 were rejected under 35 U.S.C. 102(b) as being clearly anticipated by US 5,633,856, which rejection is traversed.

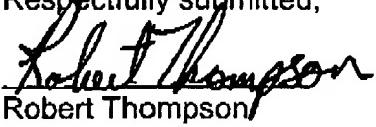
Claims 1-7, 22, and 23 were rejected under 35 U.S.C. 102(b) as being clearly anticipated by US d32,793, which rejection is traversed.

Application No. 09/670,884

The application and claims are believed to be in a condition for allowance in their present form and which allowance is respectfully requested.

In the event the Examiner considers personal contact advantageous to the disposition of this case, the Examiner is hereby authorized to call Applicant's Attorney, Robert Thompson, at Telephone Number (585) 423-2050, Rochester, New York.

Respectfully submitted,

  
Robert Thompson  
Attorney for Applicant  
Registration No. 47,137

R-T/pn  
Xerox Corporation  
Xerox Square 20A  
Rochester, New York 14644

Application No. 09/670,884

**VERSION WITH MARKINGS TO SHOW CHANGES MADE:**

**IN THE CLAIMS:**

1. (Twice Amended) An article comprising:

a disk defining a concentric [with a] circular opening[in the center of the disk]; and

a fastener for [adapted to] concentrically attaching the disk to a particle outlet opening of a classifier wheel.

2. (Amended) An article in accordance with claim 1, wherein a relative [the] thickness of the disk is greater adjacent [thicker near] the particle outlet and lesser [thinner near] adjacent a [the] periphery of the disk.

3. (Amended) An article in accordance with claim 1, further comprising a lip or rim adjacent to the concentric circular opening said lip having [which has] a thickness of from about 1.5 to about 5 times a relative [the] thickness of the disk.

4. (Amended) An article in accordance with claim 1, wherein a [the] diameter of the circular opening is nonadjustable [fixed].

5. (Amended) An article in accordance with claim 1, wherein a [the] diameter of the circular opening is adjustable.

6. (Amended) An article in accordance with claim 1, wherein a [the] diameter of the circular opening is from about 1 centimeter to about 10,000 centimeters.

Application No. 09/670,884

7. (Amended) An article in accordance with claim 1, wherein a [the] diameter of the disk is from about 10 centimeters to about 1,000 centimeters.

10. (Twice Amended) A classifier wheel comprising:  
an upper solid surface and a lower surface defining [with] a first concentric circular opening therein;

a plurality of blade vanes connecting the upper surface to the lower surface and defining a [at the] peripheral edge[s] of the upper and lower surfaces, and

an article comprising:  
a disk defining a concentric [with a] circular opening[ in the center of the disk]; and

a fastener for [adapted to] concentrically attaching the disk to a [the] particle outlet opening of said classifier wheel and wherein said article is fixed to the lower surface defining [which forms] a second concentric circular opening within the first concentric circular opening and reduces a [the] diameter of the first concentric circular opening.

15. (Amended) A classifier wheel in accordance with claim 10, wherein the upper surface and the lower surface are inwardly curvilinear from about a [the] peripheral edge[s] of the wheel to about the center of the wheel.

Application No. 09/670,884

16. (Twice Amended) An apparatus for the classification of solid particulates entrained in a fluid, comprising:

a housing containing [provided with] a feed inlet, a fine fraction outlet, and a coarse fraction outlet; and

a classifier wheel comprising an upper solid surface and a lower surface defining [with] a first concentric circular opening therein;

a plurality of blade vanes connecting the upper surface to the lower surface at the peripheral edges of the upper and lower surfaces, and

an article comprising:

a disk defining [with] a concentric circular opening[ in the center of the disk]; and

a fastener for [adapted to] concentrically attaching the disk to a [the] particle outlet opening of said classifier wheel and wherein said article is fixed to the lower surface which forms a second concentric circular opening within the first concentric circular opening and reduces a [the] diameter of the first concentric circular opening[ and an article comprising:

a disk with a circular opening in the center of the disk; and

a fastener adapted to concentrically attach the disk to the particle outlet opening of a classifier wheel].

22. (Twice Amended) A kit comprising:

a disk defining [with] a concentric circular opening[ in the center of the disk]; and

at least one fastener adapted to attach the disk to a [the] particle outlet opening of a classifier wheel.

Application No. 09/670,884

23. (Amended) An article in accordance with claim 1, further comprising [wherein the adjustment of the diameter of the circular opening is accomplished with] a centrifugal valve for adjusting the diameter of the circular opening.